NOTE: The document identifier and heading have been changed on this page to reflect that this is a performance specification. There are no other changes to this document. The document identifier on subsequent pages has not been changed, but will be changed the next time this document is revised.

INCH-POUND

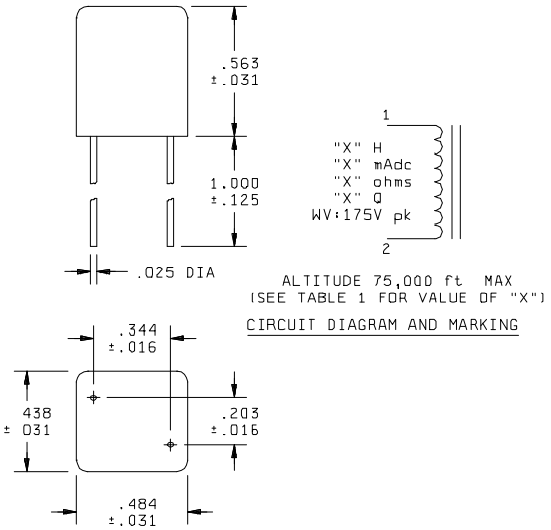
MIL-PRF-27/164C
14 February 1995
SUPERSEDING
MIL-T-27/164B
8 April 1992

PERFORMANCE SPECIFICATION SHEET

TRANSFORMER AND INDUCTORS
(AUDIO, POWER, AND HIGH-POWER PULSE),
INDUCTORS, HIGH Q, TF5R20ZZ

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-T-27.



Inches	mm	Inches	mm
.016	0.41	.438	11.13
.025	0.64	.484	12.29
.031	0.79	.563	14.30
.203	5.16	1.000	25.40
.344	8.74		

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking shall be on the side of the case.

FIGURE 1. Dimensions and configuration.

Ⓒ denotes changes

REQUIREMENTS: (When numbers in parentheses, i.e., (1-2) are used, they indicate the winding and the extreme terminals of the winding.)

Electrical ratings: See table I.

Working voltage (peak): 175 volts peak.

Design and construction:

Dimensions and configuration: See figure 1.

Case: Metal.

Material: Mu metal.

Terminals: Tin-lead plated type D4 in accordance with MIL-STD-1276.

Weight: .3 ounces maximum.

Operating temperature range: -55°C to +105°C.

Altitude: 75,000 feet maximum.

Terminal strength: Method 211, MIL-STD-202, test condition A, 2.0 pounds.

TABLE I. Electrical ratings.

Dash number 1/	(1-2) Inductance ±3% H 2/ 3/	(1-2) DC current (max) mA 4/	DC resistance at 25°C (1-2) ±20% ohms	(1-2) Quality factor		
				Q min	Voltage (rms)	Frequency (Hz)
01	.15	12	33	18	1	2000
02	.25	9	55	18	1	2000
03	.40	7	90	18	1	2000
04	.70	5	135	18	1	2000
05	1.4	3	210	18	1	1500
06	2.5	1	210	16	1	800
07	4.0	0.7	340	16	1	800
08	6.0	0.6	530	16	1	800
09	10.0	0.5	850	16	1	800
10	25.0	0.3	2300	16	1	800
11	60.0	0.2	5160	16	1	800

(C) 1/ Qualification testing and approval to M27/164-11 shall be sufficient to grant qualification approval to M27/164-01 through M27/164-11.
2/ Dash numbers 01 through 05, inductance is measured at 1 kHz, 1 V rms, 0 dc.
3/ Dash numbers 06 through 11, inductance is measured at 400 Hz, 1 V rms, 0 dc.
4/ The dc current is that amount of dc that will reduce the inductance by approximately 5 percent (8 percent maximum).

Dielectric withstanding voltage:

At sea level: 500 V rms.

At reduced barometric pressure: 300 V rms.

Vibration (high frequency): Method 204, MIL-STD-202, test condition D.

Marking location: See figure 1.

Part or Identifying Number (PIN): M27/164-(dash number from table I).

CONCLUDING MATERIAL

Custodians:
Army - ER
Navy - EC
Air Force - 85

Review activities:
Army - AR, MI, WC
Navy - AS, MC, OS, SH
Air Force - 17, 19, 99

Preparing activity:
Army - ER

Agent:
DLA - ES

(Project 5950-0845)